UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,371	01/05/2004	Eugene Mandrea	19781.01US2	2214

25541 7590 06/20/2007

NEAL, GERBER, & EISENBERG
SUITE 2200
2 NORTH LASALLE STREET
CHICAGO, IL 60602

EXAMINER	
WILLIAMS, LEONARD M	
ART UNIT	**PAPER NUMBER**
1617	

MAIL DATE	DELIVERY MODE
06/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/751,371	MANDREA, EUGENE	
	Examiner	Art Unit	
	Leonard M. Williams	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/22/2004; 2/09/2006.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Skwierczynski et al. (US Patent No. 6245776, '776) as evidenced by the Physicians Desk Reference (PDR™) entry for Aldara Cream, 5%.

'776 teaches, in the abstract, immune response modifiers (IRM) including imidazoquinoline amines as useful for the treatment of conditions at and below the mucosal surfaces via administration of such compounds to the mucosal surface. In col. 1 lines 22-66, '776 teaches that imidazoquinoline amine compounds have demonstrated potent immunostimulating, antiviral and antitumour activity as well as being useful as adjuvants for vaccine therapy. One exemplified imidazoquinoline amine with antiviral and antitumor activity is the topical formulation AldaraTM which contains imiquimod (an IRM). In col. 2 lines 24-28 of '776, preferred IRM compounds are 4-amino-2-ethoxymethyl-a,a-dimethyl-1H-imidazo[4,5-c]quinoline-1-ethanol (which is resiquimod) and 1-(2-methylpropyl)-1H-imidazo[4,5-c]quinolin-4-amine (which is imiquimod). In col. 14 lines 7-33, '776 teaches that pharmaceutical formulations for topical administration of

an IRM are particularly advantageous for topical administration to a mucosal surface. The IRM is from 0.1-9% by weight of the composition, and preferably does not exceed about 5%. In col. 15 lines 45-55, '776 discloses that the compositions can be applied topically, particularly to non-cornified epithelial surfaces such as mucosal surfaces including buccal, gingival, nasal, tracheal, bronchial, gastrointestinal, rectal, urethral, ureteral, vaginal, cervical etc...anticipating "...a method of stimulating an immune response in a virally infected individual, the method comprising: providing an imidazoquinolinamine formulation into a first nare...and covering at least a portion of the internal surface of the individual's first nare with a portion of the amount of the imidazoquinolinamine..." of claim 1, the "...method...wherein the imidazoquinolinamine formulation's active ingredient is selected from the group consisting of imiquimod and resiquimod..." of claim 2, the "...method...wherein the...formulation is disposed using a device..." of claim 3, the "...method...wherein the imidazoquinolinamine formulation comprises imiquimod...in the amount of about 12mg" of claim 4 and the "...method..wherein the imidazolequinolinamine formulation is selected from...a cream, gel, liquid, paste, aerosol, and an emulsion" of claim 6.

The examiner respectfully points out that the applicant's specification and examples therein, all use the commercially available topical cream Aldara™. On page 18 of the Aldara PDR™ document, under the heading HOW SUPPLIED it states: "Aldara (imiquimod) Cream, 5%, is supplied in single-use packets which contain 250 mg of the cream." 5% of 250 mg is 12.5 mg thus each packet provides around 12 mg of imiquimod, further as resiquimod is disclosed in the '776 patent for use in equivalent

concentrations it is inherent that resquimod can be delivered in equivalent dosages (i.e., ~12 mg).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Skwierczynski et al. (US Patent No. 6245776, '776) as applied to claims 1-6 above, and further in view of Hendeles (ABSTRACT, Selecting a Decongestant, Pharmacotherapy, 1993, nov-dec, 13, pp. 129S-134S) as evidenced by Goodman and Gilman's The Pharmacological Basis of Therapeutics, 7th edition, pages 170-171.

Skwierczynski et al. is as detailed above.

Skwierczynski et al. does not teach the use of a nasal decongestant, the use of said nasal congestant 15 min prior to administration of the imidazoquinalinamine, or the

administration of the imidazoquinalinamine every 12 hours until relief from cold symptoms is obtained.

Hendeles teaches, in the abstract, that antihistamines and decongestants are often used interchangably and in combination for a variety of upper respiratory illnesses including the common cold (viral rhinitis). Nasal congestion regardless of its cause responds well to decongestants. The topical route of administration of said decongestants provides faster and more intense decrease in nasal airway resistance. Common decongestants include phenylpropylamine, pseudophedrine, and phenylephrine (Neosynephrine-see Goodman and Gilman's The Pharmacological Basis of Therapeutics, 7th edition, pages 170-171).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the imidazoquinalinamine compounds of the '776 patent in a mucosal/nasal administration formulation to treat viral rhinitis, as the '776 patent clearly indicates that the compounds are to be applied to mucosal surfaces including the nasal passages and that the compounds posses potent immunostimulating and anti-viral properties. It would be have been obvious to one of ordinary skill in the art at the time the invention was made to administer a nasal decongestant (such as neosynephrine) prior to the '776 compounds in order to reduce the nasal airway resistance as set forth by Hendeles, thus allowing for improved application of the '776 compounds. The time of decongestant administration as at least 15min before does not indicate any particle reason for such other than to give the decongestant some time to decrease the nasal airway resistance. The administration of the '776 compounds every 12 hours until relief

from cold symptoms is obtained is a matter of routine optimization. The examiner respectfully points out the following from MPEP 2144.05: "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955); see also Peterson, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."); *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969); Merck & Co. Inc. v. Biocraft Laboratories Inc., 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed.Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997).

The examiner respectfully points out the following from MPEP 2144.06: "It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re* Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

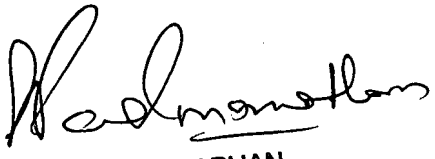
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard M. Williams whose telephone number is 571-272-0685. The examiner can normally be reached on MF 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LMW



SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER